AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-60. (Canceled)

61. (Currently Amended) A lipid compound of formula (I):

wherein

PHG is a polar head group derived from a phospholipid, a lysophospholipid, a ceramide, a monoacylglycerol, a diacylglycerol, or a triacylglycerol, or W-Linker-HG; p is from 1 to 3;

X is independently selected chosen from \underline{a} C_6 - C_{24} alkenyl containing one or more double bonds and optionally one or more triple bonds, \underline{a} C_6 - C_{24} alkynyl containing one or more triple bonds, \underline{a} C_6 - C_{24} alkyl, all optionally substituted with at least one of F. hydroxy, C_1 - C_4 alkoxy, C_1 - C_4 alkylthio, C_2 - C_5 acyloxy, and C_1 - C_4 alkyl;

Y is selected <u>chosen</u> from at least one of S, Se, SO₂, SO, [[O]] and CH₂; and Z is a C_1 - C_{10} alkyl group,

wherein each X, Y, and Z is selected chosen independently of each other when p is 2 or 3, \underline{and}

wherein Z is a C₁-C₆ alkyl group when X is S and PHG is a phosphatidylethanolamine phospholipid or phosphatidylethanolamine lysophospholipid,

with the proviso that at least one Y is not CH₂.

- 62. (Currently Amended) The lipid compound according to claim 61, wherein the polar head group is derived from a phospholipid selected chosen from the group consisting of phosphatidylserine (PS), phosphatidylcholine (PC), phosphatidylethanolamine (PE), phosphatidylinositol (PI), phosphatidylglycerol (PG), and phosphatidic acid (PA).
- 63. (Previously Presented) The lipid compound according to claim 62, wherein p is 1 or 2.
- 64. (Currently Amended) The lipid compound according to claim 62, wherein p = 2 and the polar head group is selected chosen from the group consisting of efformula (II) to (VI):

(III)

(IV)

(V) and

65. (Currently Amended) The lipid compound according to claim 62, wherein p = 1, and is represented by the following formula

66. (Currently Amended) The lipid compound according to claim 65, wherein the compound is selected chosen from the group consisting of:

67. (Previously Presented) The lipid compound according to claim 63, represented by the following formula:

Claims 68-70. (Canceled)

- 71. (Currently Amended) The lipid compound according to claim 62, wherein X is independently selected chosen from a C_6 - C_{24} alkynyl containing one or more triple bonds, wherein at least one triple bond is distanced from the terminal end of the acetylenic hydrocarbyl group by 2, 3, or 7 carbons.
- 72. (Previously Presented) The lipid compound according to claim 71, wherein one triple bond is distanced from the terminal end of the acetylenic hydrocarbyl group by 2 carbons.
- 73. (Currently Amended) The lipid compound according to claim 62, wherein X is independently selected chosen from a C₁₀-C₁₈ alkynyl containing one or more triple bonds, wherein at least one triple bond is distanced from the terminal end of the acetylenic hydrocarbyl group by 2 carbons.
- 74. (Currently Amended) The lipid compound according to claim 62, wherein X is independently selected chosen from \underline{a} C₆-C₂₄ alkenyl containing one or more double bonds.
- 75. (Currently Amended) The lipid compound according to claim 62, wherein X is independently selected chosen from an unsubstituted C₁₀-C₁₈ alkenyl.
- 76. (Currently Amended) The lipid compound according to claim 74, wherein at least one double bond is in <u>a</u> *cis* configuration.
- 77. (Currently Amended) The lipid compound according to claim 74, wherein at least one double bond is in the $\Delta 9$ position.
- 78. (Currently Amended) The lipid compound according to claim 62, wherein X is independently selected chosen from a C_6 - C_{24} alkyl.

- 79. (Currently Amended) The lipid compound according to claim 78, wherein X is independently selected chosen from a C_{10} - C_{18} alkyl.
- 80. (Currently amended) The lipid compound according to claim 62, wherein at least one Y is Se[[,]] or S-or O.
- 81. (Previously Presented) The lipid compound according to claim 80, wherein at least one Y is S.
- 82. (Previously Presented) The lipid compound according to claim 62, wherein Z is -(CH₂)_n- and n is 1 or 3.
- 83. (Currently Amended) The lipid compound according to claim 62, wherein said the compound is selected chosen from the group consisting of lipid compounds 18-23:

(19)

(20)

(21)

<u>and</u>

84. (Currently Amended) The lipid compound according to claim 62, represented by the following formula:

wherein X^2 and X^3 are independently selected chosen from the group consisting of <u>a</u> substituted or unsubstituted, C_{10} - C_{18} alkyl, C_{10} - C_{18} alkenyl, and C_{10} - C_{18} alkynyl;

 Y^2 and Y^3 are independently selected chosen from S, Se, [[O]] and CH_2 ; Z^2 and Z^3 are independently selected chosen from a C_1 - C_6 alkyl group;

with the proviso that at least one Y is not CH₂.

85. (Currently Amended) The lipid compound according to claim 62, wherein the compound is of formula

wherein X^2 and X^3 are independently selected <u>chosen</u> from the group consisting of <u>an</u> unsubstituted C_{10} - C_{18} alkyl, <u>an</u> unsubstituted C_{10} - C_{18} alkynyl.

- 86. (Currently Amended) The lipid compound according to claim 62, wherein the polar head group is derived from the head group of a phosphatidylcholine (PC) or a phosphatidylethanolamine (PE).
- 87. (Currently Amended) The lipid compound according to claim 61, wherein the polar head group (PHG) is derived from a monoacylglycerol, a diacylglycerol, or a triacylglycerol.
- 88. (Currently Amended) The lipid compound according to claim 87, represented by one of the following formulas:

89. (Currently Amended) The lipid compound according to claim 86, wherein the compound is of the formula

$$X^{2}-Y^{2}$$
 $X^{3}-Y^{3}$
 $X^{4}-X^{4}$

wherein

 Y^2 , Y^3 and Y^4 are independently <u>chosen from</u> S, Se, [[O]] and CH₂; and X^2 , X^3 and X^4 are independently <u>selected chosen from</u>[[,]] <u>a</u> substituted or unsubstituted[[,]] C_6 - C_{24} alkyl, C_6 - C_{24} alkenyl, and C_6 - C_{24} alkynyl, with the proviso that at least one Y is not CH₂.

90. (Currently Amended) The lipid compound according to claim 87, wherein the compound is of the formula

$$X^{2}-Y^{2}$$
 $X^{3}-Y^{3}$
 $X^{4}-X^{4}$

wherein

 Y^2 , Y^3 and Y^4 are independently <u>chosen</u> S, Se, [[O]] and CH₂; and

 X^2 , X^3 and X^4 are independently selected <u>chosen</u> from[[,]] <u>a</u> substituted or unsubstituted[[,]] C_{10} - C_{18} alkyl, C_{10} - C_{18} alkenyl, and C_{10} - C_{18} alkynyl, with the proviso that at least one Y is not CH₂.

91. (Currently Amended) The lipid compound according to claim 87, wherein the compound is of the formula:

$$x^{2}-s$$
 0
 $x^{3}-s$
 0
 0
 $s-x^{4}$

wherein

 X^2 , X^3 and X^4 are independently selected chosen from <u>a</u> C_{10} - C_{18} alkyl, <u>a</u> C_{10} - C_{18} alkynyl.

- 92. (Currently Amended) The lipid compound according to claim 87, wherein X^2 , X^3 and X^4 are independently selected chosen from a C_6 - C_{24} alkynyl containing one or more triple bonds, wherein at least one triple bond is distanced from the terminal end of the acetylenic hydrocarbyl group by 2, 3 or 7 carbons.
- 93. (Currently Amended) The lipid compound according to claim 87, wherein X^2 , X^3 , and X^4 are independently selected chosen from C_{10} - C_{18} alkynyl containing one or more triple bonds, wherein at least one triple bond is distanced from the terminal end of the acetylenic hydrocarbyl group by 2 carbons.
- 94. (Currently Amended) The lipid compound according to claim 87, wherein X^2 , X^3 and X^4 are independently selected chosen from C_6 - C_{24} alkenyl containing one or more double bonds.
- 95. (Currently Amended) The lipid compound according to claim 87, wherein X^2 , X^3 , and X^4 are independently selected chosen from an unsubstituted C_{10} - C_{18} alkenyl, wherein at least one double bond is placed in position 3 counted from the omega end.
- 96. (Currently Amended) The lipid compound according to claim 87, wherein at least one double bond is in <u>a</u> *cis* configuration.

97. (Currently Amended) The lipid compound according to claim 87, wherein the compound is represented by compound 24:

- 98. (Previously Presented) A combination comprising a liposome and a compound according to claim 61.
- 99. (Previously Presented) A method for the production of a lipid compound according to claim 61.
- 100. (Previously Presented) A cosmetic formulation comprising a lipid compound according to claim 61.
- 101. (Previously Presented) A pharmaceutical composition comprising a compound according to claim 61.
- 102. (Current Amended) A method of treating or preventing a condition selected chosen from syndrome X, obesity or an overweight condition, hypertension, fatty liver, diabetes, hyperglycaemia, hyperinsulinemia, insulin resistance, hyperlipidemia, hypercholesterolemia, hypertriglyceridemia (HTG), and stenosis, comprising administering to a subject in need thereof an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.
- 103. (Previously Presented) The method according to claim 102, for producing weight loss or a reduction of fat mass, or for preventing weight gain in a human or non-

human animal in need thereof, comprising administering thereto an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.

- 104. (Previously Presented) A method for the prevention or treatment of inflammatory disorders, comprising administering to a subject in need thereof an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.
- 105. (Previously Presented) A method of lowering concentration of cholesterol and triglycerides in the blood of mammals and/or inhibiting the oxidative modification of low density lipoprotein, comprising administering to a subject in need thereof an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.
- 106. (Previously Presented) A method for producing weight loss or a reduction of the fat mass in a human or non-human animal in need thereof, comprising administering thereto an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.
- 107. (Previously Presented) A method for the modification of the fat distribution and content of animals, comprising administering to a subject in need thereof an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.
- 108. (Previously Presented) A method of inhibiting or preventing the growth of tumours, comprising administering to a subject in need thereof an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.

- 109. (Previously Presented) A method for the treatment or inhibition of primary and secondary metastatic neoplasms, comprising administering to a subject in need thereof an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.
- 110. (Previously Presented) A method for the prevention or treatment of proliferative skin disorders, comprising administering to a subject in need thereof an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.
- 111. (Previously Presented) A method for the inhibition of proliferation or induction of differentiation of keratinocytes, comprising administering to a subject in need thereof an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.
- 112. (Previously Presented) A method for the prevention or treatment of inflammatory disorders, comprising administering to a subject in need thereof an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.
- 113. (Previously Presented) A method for enhancing the endogenous production of interleukin-10 (IL-10) in mammalian cells or tissues, comprising administering to a subject in need thereof an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.
- 114. (Previously Presented) A method for suppression of the endogenous production of interleukin-2 (IL-2) in mammalian cells or tissues, comprising

administering to a subject in need thereof an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.

- 115. (Previously Presented) A method for the inhibition of proliferation of stimulated peripheral mononuclear cells (PBMC), comprising administering to a subject in need thereof an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.
- 116. (Currently Amended) The pharmaceutical composition according to claim 101, admixed with <u>at least one of</u> a pharmaceutically acceptable carrier, diluent, excipient, or adjuvant.
- 117. (Previously Presented) A topically administrable pharmaceutical composition according to claim 116.
- 118. (Previously Presented) A parenterally administrable pharmaceutical composition according to claim 116.
- 119. (Previously Presented) An intravenously administrable pharmaceutical composition according to claim 116.